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NOTE BY THE SECRETARIES

to the
JOINT CHIEFS OF STAFF
on

SINGLE INTEGRATED OPERATIONAL PLAN 1962 (SIOP-62) (U)

The enclosed briefing for the President by the Chairman
Joint Chiefs of Staff, presented on 13 September 1961, is
circulated for information.

F. J. BLOUIN

M. J. INGELIDO

Joint Secretariat

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ENCLOSURE

BRIEFING FOR THE PRESIDENT
BY THE CHAIRMAN, JOINT CHIEFS OF STAFF
ON
THE JOINT CHIEFS OF STAFF
SINGLE INTEGRATED OPERATIONAL PLAN 1962
(SIOP-62)

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Chart 1

The Single Integrated Operational Plan (SIOP) is the JCS plan which provides for the optimum employment of the US atomic delivery forces in the initial attack of strategic targets in the Sino-Soviet Bloc.

Chart
Off

I shall describe to you the salient characteristics of this plan in terms of forces involved, targets attacked, and mechanics of execution of the plan. First, however, I believe it will be useful to review briefly the circumstances and actions which led to the drawing up of this plan.

As a result of the technological advances in atomic weaponry - for example, it became possible for fighter-bombers to carry megaton weapons - and, as a result of the growth in size of the atomic stockpile, in recent years the capability to deliver atomic weapons was extended to include, in large numbers, the forces assigned not only to the Strategic Air Command but also those forces assigned to Commanders in Europe, Atlantic and Pacific. For example, a March 1960 analysis of the general war atomic plans of these commanders indicated that, of all the targets firmly scheduled to be struck, about half were planned for strike by SAC forces and about half by the forces of the other commanders. Further, targets were often of interest to more than one commander. Consequently, it was clear that very close pre-planning coordination was required to maximize the effectiveness of each delivery vehicle and to eliminate unnecessary duplication.

In recognition of the nature and level of effort by all commanders with respect to atomic strikes, measures were taken by the JCS to coordinate those efforts to insure direction of appropriate level of effort against each target and to avoid interference among forces enroute to and over targets.

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a. Coordinating instructions were issued by the JCS in their Joint Strategic Capabilities Plan, the basic guidance to the commanders upon which they base their war plans.

b. World-Wide Coordination Conferences were held at which the commanders were to coordinate among themselves their atomic strike plans.

c. Joint Coordination Centers - one in England and one in Hawaii - were established to assist in the elimination of interference among striking forces.

Chart
Off

Underlying all coordination efforts was the growing atomic threat posed by the USSR. All concerned with atomic planning were determined that optimum utilization should be made of all elements of the US atomic forces.

However, it became generally recognized that the coordination machinery was not producing the pre-D Day coordination results that the increasing atomic capabilities of our commands required, and certain corrective measures were initiated by the JCS. As a further development, in mid-59, in the course of studying the matter of employment of POLARIS submarines, the Secretary of Defense (Mr. Gates) became aware of and took an active interest in the problems associated with the planning and execution of atomic strikes. Mr. Gates asked that the JCS study and report to him on those problems.

In August of 1959, General Twining, then Chairman of the JCS, placed before the JCS some eighteen questions, the answers to which he felt would make strong contribution to solution of targeting problems. Those questions essentially were as follows:

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1. What should it be?
 2. What categories of targets should it cover?
 3. What agency should develop it? Maintain it?
 4. What agency should review and approve the policy?.

Chart 4

On the subject of an integrated operational plan for strategic nuclear operations:

5. Do we need such a plan?
6. What agency should develop it? Review and approve it?
7. Should non-all weather systems attack strategic targets? If so, under what conditions?
8. Should carrier forces have H Hour strategic targets?
9. If carrier forces are relieved of strategic targets, how do we state their nuclear mission?

Chart 5

10. Is there an immediate need for a Unified Strategic Command?

11. Is a Unified Strategic Command desirable in the future?
12. If we do not form a unified command now, should POLARIS and SAC Plans be integrated?
13. If so, how?

Chart 6

On the subject of operational control of the atomic strike forces:

14. Should unified commanders have H Hour strategic targets?
15. Should Joint War Room Annexes and Joint Coordination Centers be continued?
16. What additional measures would improve coordination?

Questions 17 and 18 pertained to operational analysis and war gaming.

AN ASSOCIATED FACTOR STRONGLY BEARING ON THE QUESTION
of targeting problems was a study conducted by the staff of
the Net Evaluation Subcommittee, under the direction of
Lt General Hickey. That study, known as Study No. 2009, was
to establish, for the 1963 time period, the relative merits,
from the standpoint of deterrence, of retaliatory efforts
directed against:

- a. Primarily a Military Target System.
- b. Primarily an Urban-Industrial Target System.

or

c. An Optimum-Mix of combined Military and Urban-Industrial Target Systems.

Chart 9

Also, Study No. 2009 was to determine:

- a. The minimum number of enemy targets, by category, which the United States retaliatory forces must clearly be capable of destroying or neutralizing in order to achieve the objective of prevailing in general war.
- b. The US retaliatory forces required to neutralize or destroy this minimum number of targets.
- c. The adequacy of the required retaliatory forces to contribute effectively to the national objective of deterrence.

Chart 10

In essence, the conclusions of Study No. 2009 were as follows:

- a. Of the target systems studied (Military, Urban-Industrial, and Optimum-Mix) the Military alone and the Urban-Industrial systems alone had certain shortcomings. No major variations were evident relative to the Optimum-Mix System. Successful attack of the Optimum-Mix System should result in the US prevailing in general war.

b. Forces programmed for the 1963 time period would be adequate to deliver the necessary weapons on each target, at a level of assurance between 75 and 90 percent.

g. The range of retaliatory force structures providing between 75 and 90 percent assurance, under the assumption of surprise attack, should provide effective deterrence to general war in 1963.

Chart 11

On 12 February 1960, the President approved the concept of the Optimum-Mix Target System, for a minimum of 75 percent assurance of delivering a weapon at each bomb release line, as described in Study No. 2009. The President also referred Study No. 2009 to the Joint Chiefs of Staff as a basis for planning.

In August 1960, following consideration by the Joint Chiefs of Staff and the Secretary of Defense of the matters covered by the Eighteen Questions and of Study No. 2009, there was issued the JCS National Strategic Targeting and Attack Policy.

Chart 12

The intent of that policy was to provide guidance for the optimum employment of appropriate US atomic delivery forces

Chart 13

in the initial attack against the Sino-Soviet Bloc. The basic objective of the policy was to establish an essential national task to be accomplished under the several conditions under which hostilities may be initiated. Specific Objectives are:

Chart 14

a. To destroy or neutralize Sino-Soviet Bloc strategic nuclear delivery capability and primary military and government controls of major importance, and

b. To attack the major urban-industrial centers of the Sino-Soviet Bloc to achieve the general level of destruction as indicated in Study No. 2009.

Chart Off

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Under the National Strategic Targeting and Attack policy, a National Strategic Target List (NSTL) and a Single Integrated Operational Plan (SIOP) were to be developed to provide for the integration of committed forces for the attack of a minimum list of targets, the destruction of which would accomplish the objectives just shown.

General Thomas Power, CINCSAC, as agent of the JCS, was designated Director, Strategic Target Planning (DSTP) and was directed to organize a joint staff to develop and maintain the NSTL and the SIOP. The NSTL and SIOP were to be submitted to the JCS for approval. The commanders of the unified and specified commands were directed to commit appropriate forces to attack of the targets on the NSTL, to insure execution of those attacks, to program no attacks against targets on the NSTL except as provided in the SIOP, and to provide permanent senior representation at the headquarters of the DSTP for participation in the preparation of the NSTL and the SIOP and for liaison purposes.

Damage and assurance criteria were specified in the policy. Also specified were constraints to be observed in the programming of weapons, in order to protect friendly forces and allies. Constraints also were prescribed to be observed in the Satellite areas, toward avoiding the alienation of potentially friendly populations who are assumed to be not responsible for the acts of their governments.

Pursuant to the National Strategic Targeting and Attack , the Single Integrated Operational Plan for 1962 was prepared. On 2 December 1960, the plan was approved by the JCS and the Secretary of Defense, and was made effective on 15 April 1961.

I shall now describe for you some of the methodology employed in developing the National Strategic Target List and the Single Integrated Operational Plan.

Chart 15

The NSTL was developed from a list of more than 80,000 potential targets in the Bombing Encyclopedia. This list was analyzed, screened and finally reduced to 3729 installations which were determined to be essential for attack. Many of these are co-located in target complexes. A DGZ, or desired ground zero, can be located so that several installations may be destroyed or neutralized by a single weapon. Thus the total of 1060 DGZs cover the 3729 installations in the NSTL.

Chart 16

A breakdown of DGZs by country is shown on this chart.

Editor: The numbers and locations of DGZs in Siop-64 were deleted from this document. According to Henry Rowen, former Deputy Assistant Secretary of Defense, "the countries targeted in the SIOP have been the USSR, the People's Republic of China, and allies of these two powers in Eastern Europe and elsewhere."

Chart 17

This map will give you a feel for the geographic distribution of DGZs within the Sino-Soviet Bloc. Each red circle represents one actual DGZ. No attempt has been made to differentiate as to size or importance.

Chart Off

Now to the Plan itself. Forces of the unified and specified commands participating in attack of these targets are as shown on this chart.

Chart

- Strategic Air Command
- Pacific Command
- Atlantic Command
- European Command
- Alaskan Command

[Editor: The number of nuclear weapons committed to SIOP-62 in July from U.S. commands was as follows:

	<u>Day-to-Day Alert</u>	<u>Fully Generated Alert</u>
Strategic Air Command	1,246	2,180
Pacific Command	84	421
European Command	178	489
Atlantic Command	32	177

For details, see the chart reproduced above, p]²

SIOP forces are launched from a total of 112 bases.

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Chart 19

There are 49 bases in the US
all Strategic Air Command forces.

Deleted

(deleted)

Chart 20

Shown here are bases in the Pacific area

Deleted

Chart 21

Launch bases in the Atlantic and European areas are

shown on this chart. (deleted) [Editor: The official history of the Strategic Air Command notes that in 1961, there were 46 SAC bases in the Continental United States as well as bases in Puerto Rico, Newfoundland, and Labrador. Additional SAC bases were located in the United Kingdom, Morocco, Spain, and Guam.

The rest of the 112 bases used for SIOP-62 were those of the other commands listed above the Pacific Command, the Atlantic Command, European Command and Alaskan Command.

Chart 22

Operational Concepts.

The Targeting and Attack Policy prescribed that the SIOP provide for the initial attack only. Therefore, the foremost objective in integrating these forces was to attain the highest probability of success with this initial attack. This has been accomplished by:

Cross Targeting of aircraft and missiles on a common target system, considering the capabilities of each system. Launch bases were considered from a standpoint of location, vulnerability, and distance from the target area. A specific base survivability factor is not in the plan. However, it is recognized that many bases will come under enemy attack. This consideration caused the selection of weapon delivery vehicles from different types of bases, as well as different geographical locations, in order to achieve the best probability of delivering a weapon.

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Route Coordination was accomplished, as well as controlled timing. This helps us to avoid defenses and to take advantage of results of weapons already dropped.

Time Over Target Coordination was effected. Target times are controlled to avoid target conflicts and to insure that we do not destroy our own delivery vehicles.

Economical Weight of Effort is applied through the integration of all forces directed against a single target list. The weight of effort against each target is consistent with the worth of that target and the assurance desired on each target. As a result, unplanned duplication has been eliminated.

Optimum Strike Effort Base on Preparation Time is accomplished by a series of options which provide the JCS with a means of applying the maximum number of weapon carriers which can be generated for any given time. Warning time, whether it be in minutes or days, is the key to success of the plan. Therefore, heavy emphasis has been placed on tactical warning and quick reaction of the committed forces. Full strategic warning is also provided for.

Chart 23

Targeting Sequence.

All forces have been targeted in the order of their arrival in the target area. The sequence of targeting was first, the ballistic missiles; second, forces launching from forward areas; and last, forces from the US

The first group of forces to be targeted was that identified and maintained as the Alert Force, which was applied under conditions of tactical warning against highest targets.

Chart 24

Next to be targeted were the Follow-on Forces. The Follow-on Force is that portion of the committed forces which are not maintained in a condition for immediate reaction.

(Cont'd)

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Warning time is required to ready this force. The Follow-on Force is targeted to take advantage of the Alert Force strike; to improve the probabilities on targets scheduled for strike by the Alert Force; and, as a result of a larger force made available by preparation time, it is used to expand target coverage.

Chart 25

The penetration and delivery capabilities of all weapon systems in the plan were analyzed and applied to insure the highest probability of delivering at least one weapon on each target. The number of weapons scheduled against each ground zero was determined by the target characteristics and the desired assurance of delivery. Weapons were then scheduled until the desired assurance was obtained at each target bomb release line.

The final factor considered was that of maximum exploitation of the following factors within each force: reaction capability, launch locations, range capability, and weapon and system variety. I will cover some of these items in greater detail.

Chart 26

Reaction Capability.

Primary consideration was given to the quick reaction capability of the Alert Force, responding under conditions of tactical warning. The planning criteria for tactical warning has been established as shown here. Deleted

That portion of the SIOP force requiring time to prepare for launch, which I have previously identified as the Follow-on Force, has been assigned launch timing based upon the generation or preparation rate of the aircraft and missile systems concerned.

Chart 28

And by missile.

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Forces.

I have previously mentioned the consideration given to programmed force changes during the life of this plan.

Practically all commands have weapon systems phasing into or out of their inventory during the next 12 months. In SAC, additional ATLAS and TITAN units are becoming operational, and other systems are being phased down. In Europe there are changes in the MATADOR-MACE program. CINCLANT is scheduled for additional POLARIS capability.

Chart 29

In order to provide a degree of stability to the plan, yet effectively provide for the employment of all forces, systems scheduled for operational readiness at any time during the plan life have been assigned a target.

An additional consideration in regard to force commitments was the identification and coordination of forces assigned to SACEUR, both US and non-US. Those forces have been targeted in a joint effort, with consideration given to the SACEUR NATO commitments. Those forces will respond to common Alert and Execution Reference Hours and will accomplish prior coordination with the Omaha planning staff on all program changes. The weight of effort of these forces, both US and non-US, has been included in the plan.

Under normal conditions, the carrier forces of CINCLANT (the Second Fleet) would not be in launch position. That is, they would be operating off the East Coast of the US or in port. However, to provide for the eventuality that these forces may be ordered into their launch area, Deliberate targets have been assigned in order to capitalize on their capability.

Under conditions of strategic warning these carrier forces will be in position, and under this condition delivery probability has been assigned and weight of effort of these forces computed.

Chart 30

Non-All Weather Forces.

Twenty-two percent of the force, carrying sixteen percent of the weapons in this plan, are of a non-all weather category. In order to apply realistically the weight of effort represented by these forces, a planning factor was developed for the probability of these forces making correct target identification during conditions of bad weather and darkness. This factor was applied in determining forces necessary to provide the desired assurance.

Chart
Off

Tactics programmed for the SIOP are in two principal categories - the penetration phase and the delivery phase. In the penetration phase, the plan considers degradation of those defenses that offer the greatest threat to our forces. Peripheral defenses are scheduled to receive the first weapons. Subsequent arriving aircraft then bomb deeper defenses and primary targets as the force penetrates. The attack becomes a progressive development, following the principle of "bomb as you go."

Chart 31

Roll-back of the target system in this manner, within a selected geographical area, is called a "corridor." These corridors vary in width from (deleted) with defenses degraded within and for a (deleted) distance on either side. This distance represents potential ground-controlled interceptor coverage within the corridor.

(Deleted)

In those areas where, due to extensive Soviet defenses, roll-back of the target system or establishment of corridors is impractical, penetration is scheduled to be accomplished by maximum possible use of low level flight.

In the delivery phase, increased assurance has been obtained through the assignment of different delivery systems to the same target, by diversified tactics, and by cross-targeting on a common target system with consideration given to the capabilities of all systems in terms of reaction, circular error probable, yield, and launch location.

Optimum Launch Timing.

Should warning time be available, procedure has been established to designate the size of the strike force for immediate launch and to establish the timing of the entire force.

Chart 34

We accomplish this timing through execution options. These provide the capability to immediately launch variable-forces as a function of preparation time and also provide proper timing for each size force.

In this Plan, 14 options have been established. Option 1 is the Alert Option. Options 2 through 13 are based on preparation times of up to 14 hours. Option 14 is the Strategic Warning Option and pre-supposes a minimum of 14 hours' preparation with no maximum time established.

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This chart illustrates the option assignment based upon preparation time and the increase in available delivery systems under each successive option. The left column lists the option numbers. The center column indicates hours after Alert Hour. The right column indicates the additional delivery systems brought to ready status during the respective period.

Thus, under Option 1, the Alert Option, there are 1004 delivery systems capable of immediate launch. They carry 1685 weapons. In the event of surprise attack and only 15 minutes warning, it would be essentially the Alert Force which would constitute our retaliatory force. If one hour of preparation time is available, an additional 95 systems will have been prepared. At the end of six hours of preparation time, 1658 delivery systems will be prepared for launch under Option 7. Option 14 completes the force with a total of 2244 delivery systems generated and ready for launch, carrying a total of 3267 weapons.

Chart 36

NATO and SIOP forces use a common reference timing system.

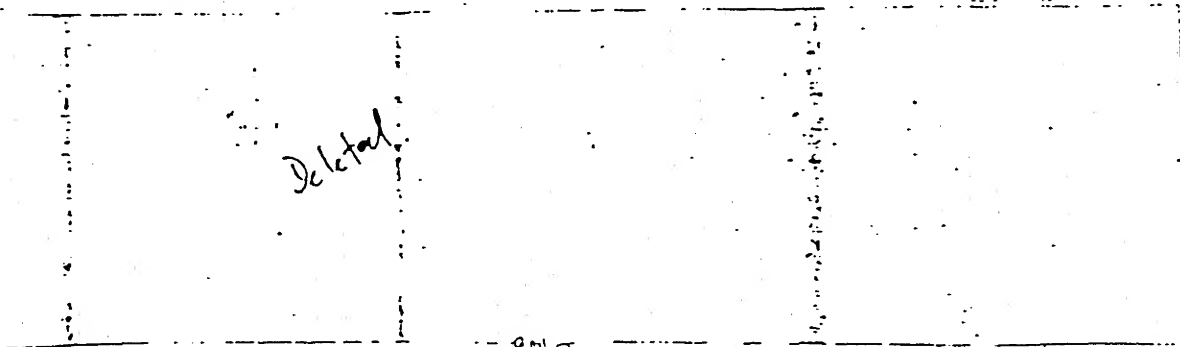


Chart 37

The JCS will designate A^{Alert} Hour based upon:

- a. Available intelligence,
- b. Recommendations of unified and specified commanders,
- or c. Declaration by unified and specified commanders of an Air Defense Emergency

or

Defense Emergency. 4

The JCS will designate E Hour and the appropriate execution option: [Editor: Execution]

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a. After consultation with appropriate commanders and the Director, Strategic Target Planning, if feasible, and

b. After receipt of authority from the President, including withhold instructions.

Unified and specified commanders may launch aircraft under positive control, a "fail-safe" system, advising the JCS.

Unified and specified commanders may, after E Hour, launch forces in advance of scheduled launch time but will avoid other scheduled SIOP strikes and will inform the JCS.

FLEXIBILITY

A fundamental characteristic of the current SIOP is that it provides for attack of an Optimum-Mix Target System. This follows the conclusions and the Presidential decision relative to Study No. 2009 that an optimum-mix of both military and urban-industrial targets must be successfully attacked in order for the US ultimately to prevail. Consequently, the SIOP is designed for the accomplishment of this total essential task. This embraces such things as timing and routing of attacks so that the maximum mutual support of the attacking forces is achieved. For example, tactics of follow-on forces relate directly to results expected to be achieved by earlier-arriving forces.

Thus, basically, the SIOP is designed for execution as a whole.

certain flexibility - some of which is built into the plan of design, and some of which, although not included in the design of the plan, is inherent in the mechanism for control of forces committed to the plan.

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Chart 38

The plan is so designed as to contain the following flexible features:

a. It may be executed as a total plan

(1) In retaliation to a Soviet nuclear strike of the US, or

(2) As a preemptive measure.

(The ballistic missiles covered by the plan are assigned alternate targets for the two conditions of retaliation and preemption.)

b. Strikes can be withheld against targets in any or all of the Satellites except for defensive targets.

(Also it would be possible to direct withholding of strike of all targets in the Satellites, providing the CINCs are so notified sufficiently in advance of E Hour to permit alteration of existing plans.)

In addition to the above designed flexibility, because of the positive control we exercise over our nuclear forces, it would be possible to direct that attack be withheld against any specific category or categories of targets in any area. For example, it would be possible to order that no direct attacks be made on cities.

However, it must clearly be understood that any decision to execute only a portion of the entire plan would involve acceptance of certain grave risks.

Chart
Off

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As earlier pointed out, the plan is designed for execution as a whole, and the exclusion of attack of any category or categories of targets would, in varying degree, decrease the effectiveness of the plan. There is no effective mechanism for rapid re-work of the plan, after order for its execution, for a different set of conditions than for which it was prepared. Further, the characteristics of the greater majority of the weapons systems now committed to the plan are such that if withheld from their scheduled attack of assigned targets their survival for subsequent use would not be assured.

Thus, withholding of a portion of the planned attack could degrade our plan and the forces committed to it to the point that the task essential to our national survival might not be fulfilled.

There are additional factors which bear on partial execution of the SIOF.

The very great majority of targets now covered by the SIOF are military in nature. For example, of about 1000 DGZs covered by the plan, some 800 are military targets. Further, atomic weapons are relatively non-discriminating, particularly with respect to fallout. Consequently, because of the relatively high number of military targets, the proximity of many of those targets to urban-industrial centers, and the characteristics of atomic weapons, there is considerable question that the Soviets would be able to distinguish between a total attack and an attack of military targets only even if US authorities indicated that the US attack had been limited to attack of military targets.

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Another point relates to the thought that by concentrating attack on military targets only, the damage inflicted by the Soviets on the United States might significantly be reduced. The current SIOP provides for a very high level of assurance of success against Soviet targets posing a direct nuclear threat to the United States. Under any circumstances - even a preemptive attack by the US - it would be expected that some portion of the Soviet long-range nuclear force would strike the United States.

It is not clear that increased weight of US effort against military targets over that already provided by the SIOP would significantly alter the strength of Soviet strikes on the US. Clearly the most important factor affecting damage to the US is that of whether the US acts in retaliation or preemption.

As an additional point, while personnel casualties would be somewhat reduced if urban-industrial installations were not directly attacked, nevertheless, because of fallout from attack of military targets and co-location of many military targets with urban-industrial targets, the casualties would be many millions in number. Thus, limiting attack to military targets has little practical meaning as a humanitarian measure.

The Single Integrated Operational Plan was designed to meet requirements under conditions such that our national survival is at stake. If the enemy were to launch an all-out nuclear attack against the US and its allies during the current time period, the expected gross disruption of facilities, military capabilities, communications and control elements, and other national assets imposes an overriding requirement for simplicity of military response. This overriding requirement severely limits the operational responses which

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may practically be planned - this notwithstanding how desirable some responses individually might be under certain circumstances. The ability to defeat the enemy must not be lost by the introduction into the SIOP of an excessive number of options which would contribute to confusion and lower our assurance of success under the most adverse circumstances.

CONCLUSION

In conclusion, we believe that the current SIOP effectively integrates in a well-planned and coordinated attack the forces committed. Further, the plan is well designed to meet the objectives prescribed in the policy governing its preparation. Attainment of those objectives should permit the US to prevail in event of general nuclear war.

FOOTNOTES

1. Henry s. Rowen, "Formulating Strategic Doctrine", Part III, Vol. 4, Appendix K, to The Report of the Commission on the Organization of the Government for the Conduct of Foreign Policy, (Washington, DC: USGPO, 1975) p. 220. Also see Draft September 23, 1961, Appendix 1 to the Memorandum for President, Recommended Long-Range Nuclear Delivery Forces, OSD-FOI, p. 8.
2. Cyrus Vance, Memorandum for the President, (October 3, 1964 Subject: Military Increases Since Fiscal Year 1961, TAB, National Security Files, Agency Files, Box 11-12, Department of Defense, Vol. 1, Lyndon Baines Johnson Library.
3. J.C. Hopkins, The Development of the Strategic Air Command, 1946-1981, Office of the Historian, Headquarters, Strategic Air Command, OFFUTT Air Force Base, Nebraska, 1982, p. 5.
4. In the 1959 North American Air Defense Command Defense Readiness Conditions (DEFCON) guidance document, it was stated that CINCNORAD or the Deputy CINCNORAD had the authority to declare Air Defense Emergency (Exercise term: "Big Noise"), the alert status above DEFCON 1, in the following situation: "Significant strategic and/or tactical indications of hostilities against the U.S. forces overseas, U.S. allies (,) on U.S. possessions and /or North American Continent. War is imminent and may occur momentarily." North American Air Defense Command, Defense Readiness Conditions CCS 3180 Emergency Readiness Plans, 20 April 1959, Records of the United States Joint Chiefs of Staff (JCS) 1959, Record Group 218. National Archives; NORAD Regulation no. 55-1, 27 April 1960, CCS 3180 Emergency Readiness Plans, (12 January 1960), JCS 1960.